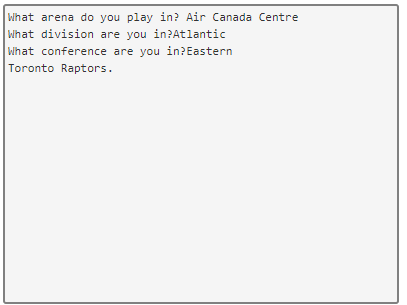
**Java Script Check Point 2**

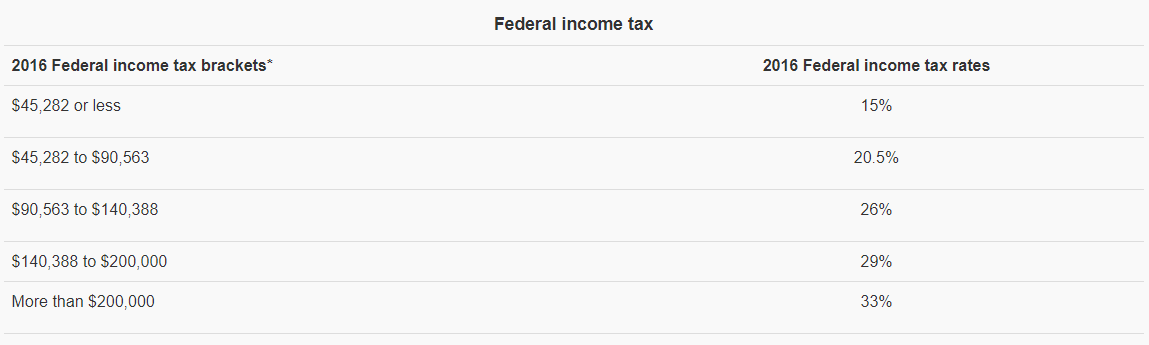
**Use your problem solving skills to answer the questions below in the “console” section of the Sandbox. Try your best to answer these questions on your own as they will prepare you for future lessons. I encourage you to look back at your previous CodeHS lessons if you need any refreshing of the material.**

1. **The NBA is comprised of 30 teams, 6 divisions, and 2 conferences. They are:**

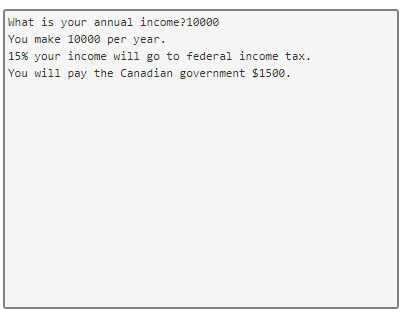
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Eastern Conference** | | | **Western Conference** | | |
| **Atlantic** | **Central** | **Southeast** | **Northwest** | **Pacific** | **Southwest** |
| **Toronto Raptors**  (Air Canada Centre) | **Detroit Pistons**  (Little Caesars Arena) | **Orlando Magic** (Amway Center) | **Minnesota Timberwolves**  (Target Center) | **LA Lakers** (Staples Center) | **San Antonio Spurs**  (AT&T Center) |
| **Brooklyn Nets**  (Barclays Center) | **Chicago Bulls**  (United Center) | **Miami Heat**  (American Airlines Arena) | **Portland** Trailblazers (Moda Center) | **LA Clippers** (Staples Center) | **Houston Rockets** (Toyota Center) |
| **Philadelphia 76ers**  (Wells Fargo Center) | **Cleveland Cavaliers**  (Quicken Loans Arena) | **Washington Wizards**  (Capital One Arena) | **Oklahoma City Thunder**  (Chesapeake Energy Arena) | **Sacramento Kings**  (Golden 1 Center) | **Memphis Grizzlies**  (FedEx Forum) |
| **New York Knicks**  (Madison Square Garden) | **Milwaukee Bucks**  (BMO Harris Bradley Center) | **Charlotte Hornets**  (Spectrum Center) | **Denver Nuggets**  (Pepsi Center) | **Golden State Warriors** (Oracle Arena) | **New Orleans Pelicans** (Smoothie King Center) |
| **Boston Celtics**  (TD Garden) | **Indiana Pacers**  (Bankers Life Fieldhouse) | **Atlanta Hawks**  (Phillips Arena) | **Utah Jazz**  (Vivint Smart Home Arena) | **Phoenix Suns**  (Talking Stick Resort Arena) | **Dallas Mavericks**  (American Airlines Center) |

**Categorizing a lot of information is an important part of creating a basic database. Create a database for the NBA which asks and stores key information about its 30 teams. Prompt the user for this information to reveal the name of the team they are looking for. The user will be asked “What conference does the team play in?”, “What division does the team play in?” and “Which arena does this team play in?”. Through asking these questions, the team name should be revealed to the user and printed out in the console view as seen in the example below.**



1. **At Monty Burns’ Casino you must have three seashells show up on the screen to win on a slot machine. The pictures used on the slot are a seashell, a fish, and a boat. When all three pictures of a seashell show up, the winner receives $1000. When two fish and one boat appear, the player receives $500. Create a program that determines if the player has won the $1000 prize, the $500 dollar prize, or if they did not win anything. Remember, only the two scenarios mentioned above warrant a winner. Any other combination will be a loss.**
2. **Canadians are taxed differently depending on the amount of money that they make in a year. Below is a chart that shows the different tax brackets in Canada:**

**Using the information in the chart above, create a program that will ask the user for their annual income. Once the user types in their annual income, the computer will then print out to them their response of how much money they make a year. Based on their income, the computer will then print out how much they will be taxed. Finally, the computer will take their annual income and calculate how much they will owe the federal government in income tax and will print it out for the user to see.**



The questions are meant to challenge you so don’t get frustrated if they don’t come to you quickly…they will take time. Please submit your code to [jp2techdropbox@gmail.com](mailto:jp2techdropbox@gmail.com) once you have completed both questions.

**Evaluation for questions**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Grade** | **4**  **100-90** | **3**  **89-75** | **2**  **74-60** | **1**  **59-50** |
| **Criteria** | The program works and meets all of the specifications. The code is exceptionally well organized and very easy to follow.  The code is extremely efficient without sacrificing readability and understanding. The code incorporates all of the required criteria of the lab. | The program works and produces the correct results and displays them correctly. The code is fairly easy to read.  The code is fairly efficient without sacrificing readability and understanding. The code incorporates most of the required criteria for the lab. | The program produces correct results but does not display them correctly. The code is readable only by someone who knows what it is supposed to be doing.  The code is unorganized and it is difficult to navigate the page. The student did not include some of key elements required in the lab. | The program is producing incorrect results. The code is poorly organized and very difficult to read.  The code uses incorrect tags and does not work in a browser.  The code includes a small amount of the required criteria. |